ISSN 0399-0311

VOLUME 36, N° 3, DECEMBRE 1979

Ce numéro termine le volume 36

QH
212
E4J6

Biologie Cellulaire

AN INTERNATIONAL JOURNAL OF CELLULAR BIOLOGY

UNDER THE AUSPICES OF THE EUROPEAN CELL BIOLOGY ORGANIZATION

PUBLIÉ PAR LA SOCIÉTÉ FRANÇAISE DE MICROSCOPIE ÉLECTRONIQUE, AVEC LE CONCOURS DU CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE ET DE L'INSTITUT NATIONAL DE LA SANTÉ ET DE LA RECHERCHE MÉDICALE

Numéro 1, octobre 1979

Anciennement : Journal de Microscopie et de Biologie Cellulaire

MÉMOIRES ORIGINAUX

MORCILLO G. and de la TORRE C. Mapping nucleologenesis in relation to transcription 1

WANSON J.C., MOSSELMANS R., BROUWER A. and KNOOK D.L. Interaction of adult rat hepatocytes and sinusoidal cells in coculture 7

BOUCHE G., GAS N. and PARIS H. Isolation of carp hepatocytes by centrifugation on a discontinous ficoll gradient. A biochemical and ultrastructural study 17

MATA L.R. The secretory cycle of the hamster seminal vesicle epithelial cells as studied *in vitro* by electron microscopic autoradiography 25

JUILLARD M.T. and COLLIN J.P. Membranous sites of oxidative deamination: a comparison between ultracytochemical and radioautographic studies in the pineal organ of the wall lizard and the parakeet 29

LOCKSHIN R.A. and BEAULATON J. Programmed cell death. Chloroquine limits resorption but does not delay its onset. An ultrastructural and biochemical study 37

NECHAD M. and BARNARD T. Development of the interscapular brown adipose tissue in the hamster. I. Two pathways adipocyte differentiation and the development of the sympathetic innervation 43

BALLAN-DUFRANÇAIS C., TRUCHET M. and DHAMELINCOURT P. Interest of raman laser microprobe (mole) for the identification of purinic concretions in histological sections 51

SSYMANK V., BÜHRMANN H. and ROBINSON D.G. Effect of inhibitors of RNA and protein synthesis on chloroplast development in a pigment mutant of *Scenedesmus obliquus* (algae) 59

MARANO F. Biosynthèse des DNA nucléaire et chloroplastique chez une volvocale sans paroi 65

BRANGEON J. and MUSTARDY L.A. The ontogenetic assembly of intrachloroplastic lamellae viewed in 3-dimension 71

GIRAUD G. and CABIOCH J. Ultrastructure and elaboration of calcified cell-walls in the coralline algae (Rhodophyta, Cryptonemiales) 81

LETTRES A L'ÉDITEUR

HUBERT J., BOUVIER D. and BOUTEILLE M. Nuclear cortex: dissociation of nuclei isolated from cultured human cells 87

MAUNOURY R. Mise en évidence de la centrosphère de cellules humaines par la technique d'immunoperoxydase avec des anticorps naturels 91

FRELIN C. Collagen accumulation by primary cultures of new born rat heart cells 95

Numéro 2, novembre 1979

Anciennement : Journal de Microscopie et de Biologie Cellulaire

Lysosomes in Endocrine Secretions

Edited by
Claude SIMON and Andrée TIXIER-VIDAL

CONTENTS

FOREWORD by Claude SIMON and Andrée TIXIER-VIDAL 99

Cell organelles and production of secretory products; hormone action upon cell organelles.
NOVIKOFF A.B., NOVIKOFF P.M. 101

Neurohypophyseal peptides precursors in the hypothalamo-neurohypophysis tract. Immunological characterization of higher molecular weight forms of neurophysins, somatostatin and endorphins.
LAUBER M., CAMIER M., MASSE M.J.O. and COHEN P. 111

Processing of two forms of the common precursor for α-melanotropin and β-endorphin in the rat pars intermedia.
CRINE P., SEIDAH N.G., GOSSARD F., LIS M. and CHRETIEN M. .. 119

The biosynthesis and conversion of islet cell hormone precursors: a brief review.
TAGER H.S., PATZELT C., CHAN S.J., QUINN P.S. and STEINER D.F. 127

Kinetic approach to the lysosome-mediated iodine and hormonal secretion by the thyroid.
SIMON C., DANG J., PENEL C., BASTIANI P. and MIQUELIS R. 137

Ultrastructural studies of membrane movements during hormone release in the neurohypophysis.
THEODOSIS D.T. 147

A double-way traffic related to exocytosis and endocytosis in the lactating rat pituitary *in vivo*.
VILA-PORCILE E. and OLIVIER L. 155

Route of luminal plasma membrane retrieved by endocytosis in thyroid follicle cells.
HERZOG V. and MILLER F. 163

Endocytosis and lysosomes in cultured prolactin cells under stimulation by thyroliberin.
TIXIER-VIDAL A., MOREAU M.F., PICART R. and GOURDJI D. .. 167

Use of subcellular fractionation to assess the fate of membrane-bound ligands in intact rat liver. Studies with ^{125}I-labeled wheat germ agglutinin and insulin.
DESBUQUOIS B., HUET DE FROBERVILLE A. and WILLEPUT J. .. 175

Structural and functional aspects of lysosomes in the neurosecretory neurons.
BOUDIER J.A., BOUDIER J.L., MASSACRIER A., CAU P. and PICARD D. 185

Lysosomal control in neurosecretion: the roles of cellular compartmentation and granule age.
MORRIS J.F. and NORDMANN J.J. 193

Index to cited authors 201

Index to subjects 205

Numéro 3, décembre 1979

Anciennement : Journal de Microscopie et de Biologie Cellulaire

Membrane Glycoconjugates

edited by

Michel MONSIGNY and Joseph SCHREVEL

CONTENTS

Foreword
MONSIGNY M. and SCHREVEL J. 209

Current aspects of glycoconjugate biosynthesis. (*A review*).
CORFIELD A.P. and SCHAUER R. 213

Application of cytochemical methods in electron microscopy. Investigation on cell surface receptors. (*A review*).
TEMMINK J.H.M. 227

The ultrastructural localization of cell surface glycoconjugates: Affinity cytochemistry via the avidin-biotin complex. (*A review*).
SKUTELSKY E. and BAYER E.A. 237

Evaluation of colloidal gold as a cytochemical marker for transmission and scanning electron microscopy. (*A review*).
HORISBERGER M. 253

Visualization of cell surface carbohydrates by a general two step lectin technique: lectins and glycosylated cytochemical markers.
SCHREVEL J., KIEDA C., CAIGNEAUX E., GROS D., DELMOTTE F. and MONSIGNY M. 259

Relationships between intramembrane particles and glycoconjugates in the ciliary membrane of the quail oviduct.
SANDOZ D., BOISVIEUX-ULRICH E. and CHAILLEY B. 267

Differential characterization of carboxyl and sulphate groups in thin sections for electron microscopy.
THIÉRY J.P. and OVTRACHT L. 281

Membrane lectins. (*A short review*).
MONSIGNY M., KIEDA C. and ROCHE A.C. 289

Cell contacts mediated by D-galactose specific lectins on liver cells.
KOLB H., KOLB-BACHOFEN V. and SCHLEPPER-SCHÄFER J. 301

Cell surface morphology and concanavalin A binding sites.
COLLARD J. 309

Role of fibronectin in the adhesiveness of bovine lens epithelial cells.
HUGHES R.C., MILLS G., COURTOIS Y. and TASSIN J. 321

ABSTRACTS of POSTER SESSION 1*a*

Index to cited authors 331

Index to subjets 337

INDEX DU VOLUME 36

Index des auteurs 341

Index des matières 344

SOMMAIRE DU VOLUME 36.

ACKNOWLEDGMENT TO REVIEWERS

Acknowledgment to Reviewers

The Editors of BIOLOGIE CELLULAIRE wish to thank the following scientists for accepting to review the articles sent to the journal. Their names will be listed each year, in the December issue.

A

Adnet J.-J., Reims.
Allen R.D., Honolulu.
André J., Orsay.
Arntzen C., Urbana.
Avrameas S., Paris.
Azoulay E., Marseille.

B

Baccetti B., Sienne.
Basset F., Paris.
Baudhuin P., Bruxelles.
Baulieu E.E., Le Kremlin Bicêtre.
Beale G.H., Edinburgh.
Beaufay H., Bruxelles.
Beisson J., Gif sur Yvette.
Benedetti E., Paris.
Benveniste P., Strasbourg.
Berezney R., Buffalo.
Berlakoff C., Paris.
Bessis M., Le Kremlin Bicêtre.
Bisalputra T., Vancouver.
Blanquet P.R., Lille.
Boisvieux J.-F., Paris.
Bonfils S., Paris.
Bouchaud C., Paris.
Bouligand Y., Ivry sur Seine.
Bourdu R., Orsay.
Bourguet J., Gif sur Yvette.
Bouteille M., Paris.
Brasch K.R., Kingston.
Breton-Gorius J., Créteil.
Briantais J.-M., Gif sur Yvette.
Burger M.M., Bâle.
Busson-Mabillot S., Ivry sur Seine.
Buvat R., Marseille.

C

Cachon J., Villefranche sur Mer.
Calas A., Marseille.
Carriere R., Brooklyn.
Cassier P., Paris.
Catesson A.-M., Paris.
Caulfield J.B., Columbia.
Cazenave P.-A., Paris.
Changeux J.-P., Paris.
Charret R., Orsay.
Chevallier J., Talence.
Chibon P., Grenoble.
Clérot J.-C., Orsay.
Collet A.J., Québec.
Collin J.-P., Poitiers.
Comar D., Orsay.
Corabœuf E., Orsay.
Croisille Y., Nogent sur Marne.

D

Dadoune J.-P., Paris.
Daems W. Th., Leiden.
Daillie J., Villeurbanne.
Danon D., Rehovot.
De Brabander M., Beerse.
Delain E., Villejuif.
Denis H., Gif sur Yvette.
Descarries L., Montréal.
Dieterlen F., Nogent sur Marne.
Droz B., Gif sur Yvette.
Dubois M.-P., Nouzilly.
Dubois P., Oullins.
Dupeyrat R., Paris.
Dupouey P., Paris.
Duquesne M., Paris.
Dustin P., Bruxelles.

E

Ebel J.-P., Strasbourg.
Echalier G., Paris.
Echlin P., Cambridge.
Eckert B.S., Buffalo.

F

Fakan S., Lausanne.
Farquhar M., New Haven.
Fawcett D.W., Boston.
Finlayson L.H., Birmingham.
Fiszer-Szafarz B., Orsay.
Fortet R., Paris.
Fougereau M., Marseille.
Fox H., Londres.
Franke W.W., Heidelberg.
Freyss-Béguin M., Paris.
Freyssinet G., Villeurbanne.

G

Galle P., Créteil.
Gargouil Y.-M., Poitiers.
Gary Bobo C., Paris.
Gautheron D., Villeurbanne.
Geraerts W.P.M., Amsterdam.
Gerschenfeld H., Paris.
Gimenez-Martin G., Madrid.
Goessens G., Liège.
Gontcharoff M., Reims.
Greuet C., Nice.
Grunberg-Manago M., Paris.
Guelin M., Paris.
Guern J., Paris.
Guillouzo A., Rennes.
Gulik T., Gif sur Yvette.

H

Hadjiolov A.A., Sofia.
Haguenau F., Paris.
Hay E.D., Boston.
Heidemann S.R., East Lansing.
Hernandez-Verdun D., Paris.
Herzog V., Munich.
Huxley H.E., Cambridge.

J

Jacquot R., Reims.
Jamieson J.D., New Haven.
Jard S., Paris.
Johannessen J.V., Oslo.
Joliot P., Paris.
Joly P., Strasbourg.
Jupin H., Perpignan.

K

Karnovsky M.L., Boston.
Kloppel G., Hambourg.

L

Lacroix J.-C., Ivry sur Seine.
Lafontaine J.G., Québec.
Lambert A.-M., Strasbourg.
Lance C., Paris.
Le Douarin G., Nantes.
Le Douarin N., Nogent sur Marne.
Le Goascogne C., Le Kremlin Bicêtre.
Leloup R., Namur.
Littler M.M., Irvine.

M

Maciera Coelho, Villejuif.
McIntosh J.R., Boulder.
Magalhaes M., Porto.
Martoja R., Paris.
Matile Ph., Zürich.
Mazliak P., Paris.
Mego J., University Alabama.
Mignot J.-P., Clermont-Ferrand.
Mirre C., Marseille.
Monroy A., Naples.
Monsigny M., Orléans.
Montreuil J., Villeneuve d'Ascq.
Moor H., Zürich.
Morre D.J., West Lafayette.
Moscona A.A., Chicago.
Mounolou J.-C., Orsay.
Moyne G., Villejuif.
Munger B.L., Hershey.
Murison G.L., Coral Gables.

N

Nadal C., Orsay.
Nadler N.J., Montréal.
Noirot Ch., Dijon.
Noirot-Timothée C., Dijon.
Novikoff A.B., New York.

O

Odartchenko N., Lausanne.
Ohad I., Jérusalem.
Ovtracht L., Ivry sur Seine.

P

Page F.C., Cambridge.
Palay S.L., Boston.
Pantaloni D., Gif sur Yvette.
Patte J.-C., Orsay.
Paulin D., Paris.
Petitprez A., Lille.
Pinto Da Silva P., Bethesda.
Porte A., Strasbourg.
Poux N., Paris.
Prunieras M., Paris.
Pudles J., Orsay.
Puiatti M., Pise.
Puiseux-Dao S., Paris.

R

Rebeiz C.A., Urbana.
Revel J.-P., Pasadena.
Robineaux R., Paris.
Roland J.-C., Paris.
Rosenfeld C., Villejuif.
Rossignol B., Orsay.
Rozier C., Grenoble.
Ryter A., Paris.

S

Satir B., New York.
Scheib D., Nogent sur Marne
Schiff J.A., Waltham.
Schrével J., Poitiers.
Scotto J., Le Kremlin Bicêtr
Sharon N., Rehovoth.
Simard R., Montréal.
Sjostrand F.S., Los Angeles.
Smith D.S., Miami.
Sommerville J., St Andrews.
Sotelo C., Suresnes.
Soyer M.O., Banyuls sur Mer
Staehelin L.A., Boulder.
Stevens B., Toulouse.
Stoebner P.E., Grenoble.
Suter E., Bale.
Szollosi A.M., Paris.
Szpirer C., Rhode St Genèse

T

Taxi J., Paris.
Temmink J.H.M., Amsterdam.
Terepka R., Rochester.
Tilney L.G., Philadelphia.
Tixier-Vidal A., Paris.
Truffa-Bachi P., Paris.

V

Vernier J.-M., Orsay.
Vigil E., Milwaukee.
Vignais P., Grenoble.

W

Wanson J.C., Bruxelles.
Wattiaux R., Namur.
Waxdal M., Bethesda.
Weibel E.R., Berne.
West C.M., Pasadena.

Y

Young R.W., Los Angeles.

Z

Zajdela F., Orsay.
Zalta J.-P., Toulouse.